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MONETARY REGULATION IN THE ECONOMIC GROWTH OF A STATE

Abstract. In the article it is provided a comparative analysis of monetary regulation models and explores their impact on economic growth.

The aim of the paper is to study models of monetary regulation and their impact on economic growth.

It has been established that monetary regulation of any country in the world should be aimed at ensuring economic growth. The authors of the article proved that monetary regulation should be considered as a source of economic shifts, an increase in real wages and living standards accordingly; it acts as a measure of inflationary processes' containment, which, in turn, meets strategic objectives of monetary policy.

The study showed that the rapid development of monetary policy and economic growth theories is marked by certain contradictions, uncertainty and cross flows. The evolution of theories is represented by the Keynesian Liquidity Preference Theory, Monetarism, Neoclassical Real business-cycle theory, the Neo-Keynesian model, and the New Consensus Model. Each of the models has its own characteristics, based on the objects of monetary regulation (money supply, inflation, interest rates, exchange rate).

Based on the analysis of the views of researchers on the impact of monetary regulation on economic growth, the authors concluded that concepts are divided according to those that characterize weak relations between these phenomena, and those that prove close correlation. It is concluded that the influence of monetary regulation on economic growth takes place when choosing the regulatory model itself and instruments for its implementation. It is proved that the model of monetary regulation should be based on developed monetary rules.

The authors of the article proved that in Ukraine, in conditions of using a monetary design based on the inflation targeting regime and taking into account the importance of increasing the efficiency of using main instruments of monetary regulation, it is necessary, first of all, to ensure the consistency of monetary and fiscal policies.

The coordination of monetary and fiscal policies should consist in developing and implementing them in such a way that they do not contradict each other and together contribute to

the achievement of the common goals of economic policy, such as sustainable economic growth and low unemployment in terms of long-term price and external stabilities.

It is concluded that the insufficient efficiency of the monetary transmission mechanism is reflected in the imbalance of money and foreign exchange markets, the deformation of the credit market and the credit climate degradation, and the decrease in the influence of monetary impulses of the central bank on both the financial system and the real sector of the economy. That is, the main problem of the significant influence of monetary regulation on economic growth in the country lies in restoring the effectiveness of the channels of the transmission mechanism of monetary policy, which depends on the choice of monetary design.

Keywords: monetary design, economic growth, monetary instruments, monetary regulation, monetary rules.

JEL Classification E50, 58; O49

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МОНЕТАРНЕ РЕГУЛЮВАННЯ В ЕКОНОМІЧНОМУ ЗРОСТАННІ ДЕРЖАВИ

Анотація. Здійснено порівняльний аналіз моделей монетарного регулювання і досліджено їхній вплив на економічне зростання.

Метою роботи є дослідження моделей монетарного регулювання та їхнього впливу на економічного зростання.

Визначено, що монетарне регулювання будь-якої країни світу повинно бути націлено на забезпечення економічного зростання. Доведено, що монетарне регулювання має розглядатись як джерело економічних зрушень, підвищення реальної заробітної плати і, відповідно, рівня життя населення; виступає засобом стримування інфляційних процесів, що, у свою чергу, відповідає стратегічним цілям грошово-кредитної політики.

Проведене дослідження засвідчило, що стрімкий розвиток теорій грошово-кредитної політики та економічного зростання вирізняється певними суперечностями, невизначеністю та перехресними течіями. Еволюція теорій представлена кейнсіанською теорією переваги ліквідності, монетаризмом, неокласичними реальними бізнес-циклами, неокейнсіанською моделлю і новою моделлю консенсусу. Кожна з моделей має особливості, виходячи з об'єктів монетарного регулювання (грошова маса, інфляція, процентні ставки, обмінний курс).

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За результатами аналізу поглядів дослідників щодо впливу монетарного регулювання на економічне зростання, автори дійшли висновку, що думки поділяються як на ті, що характеризують слабкий взаємозв'язок між цими явищами, і ті, що доводять тісний взаємозв'язок. Зроблено висновок про те, що вплив монетарного регулювання на економічне зростання має місце при виборі самої моделі регулювання та інструментів його реалізації. Доведено, що модель монетарного регулювання повинна спиратися на розроблені монетарні правила.

Доведено, що в Україні, в умовах застосування монетарного устрою на підставі режиму таргетування інфляції та враховуючи важливість підвищення ефективності використання основних інструментів монетарного регулювання, потрібно, перш за все, забезпечити узгодженість монетарної та фіскальної політик.

Координація грошово-кредитної та фіскальної політик повинна полягати у виробленні та реалізації їх таким чином, щоб вони не суперечили одна одній і разом сприяли досягненню загальних цілей економічної політики, якими є стале економічне зростання і низький рівень безробіття за довгострокової цінової стабільності та зовнішньої стійкості.

Зроблено висновок про те, що недостатня дієвість монетарного трансмісійного механізму знайшла відображення в розбалансуванні грошового і валютного ринків, деформації кредитного ринку та погіршенні кредитного клімату, зменшенні впливу монетарних імпульсів центрального банку як на фінансову систему, так і на реальний сектор економіки. Основна проблема вагомого впливу монетарного регулювання на економічне зростання в державі міститься у відновленні дієвості каналів трансмісійного механізму грошово-кредитної політики, який залежить від вибору монетарного устрою.

Ключові слова: монетарне регулювання, економічне зростання, монетарний устрій, монетарні правила, інструменти грошово-кредитного регулювання.

Формул: 0; рис.: 7; табл.: 2; бібл.: 23.

Introduction. Monetary regulation of any country in the world should be aimed at ensuring economic growth. At the same time, external and internal equilibrium should be achieved, which is a problematic issue of macroeconomic regulation. Strengthening the importance of monetary regulation in the context of globalization, financial deregulation and permanence of crises actualizes study on the features of methods and instruments of its implementation, evaluating the effectiveness of transmission mechanisms, possibilities and directions of its impact on economic growth in the state. Effective monetary regulation and its influence's researches on overcoming the structural imbalances of the economy in a country are important for any society. This problem is particularly relevant in the search for ways to stabilize economic development in states where the economy is at the stage of a post-crisis syndrome, there is an absence of sustainable growth rates in the real sector of the economy, and disruptions in relations between financial and socio-economic spheres.

Monetary regulation should be considered as a source of economic shifts, an increase in real wages and living standards accordingly; it acts as a measure of inflationary processes' containment, which, in turn, meets strategic objectives of monetary policy [1, p. 9].

The development of the system of monetary relations in Ukraine has recently acquired special significance in public life, assuming the state of the financial and banking system significantly affects the socio-economic development of a country. The monetary system of a state is aimed at providing the market economy with mechanisms and instruments that are used by public authorities to effectively manage a national economy [2, p. 500].

Global experience shows that the search for effective instruments of monetary regulation affects the competitiveness of business entities and the economic growth of a country as a whole. Therefore, the question of determining factors in the context of monetary regulation's components that affect the economic growth of a state is an relevant issue for research.

Analysis and statement of the research problem. To the problem of the monetary regulation's influence on economic growth are devoted scientific papers of foreign researchers such as J. Keynes [3], J. Gali [4], M. Goodfriend [5], R. Arestis [6], S. Asongu [7] and others. In the named studies it is considered models of monetary regulation and investigated problems of harmonizing monetary and fiscal policies with the aim of achieving economic growth of a state.

Among Ukrainian scientists, the researches of L. Matrosova [2], T. Korolyuk [8], A. Vovchak [9] and V. Mishchenko [10] should be noted. L. Matrosova emphasizes the importance of improving the monetary policy of a state towards ensuring the national economy's stable development [2, p. 503—504]. T. Korolyuk defines stages of developing the rules of monetary policy and factors affecting efficiency of its use [8, p. 41]. A. Vovchak proposes the use of the most acceptable postulates of various economic theories and schools, which should be taken into account when conducting monetary policy and monetary regulation by central banks [9, p. 6—7]. V. Mishchenko defines the role and functions of a central bank in the process of monetary regulation of an economy and the implementation of monetary policy aimed at supporting its growth [10, p. 90].

Further scientific research is intended to help overcome the main problems of monetary regulation related to improving the institutional basics of authorities for the implementation of state economic policy in the monetary sphere by using its instruments and methods to stimulate economic development [21; 22; 23].

Therefore, the aim of the paper is to study models of monetary regulation and their impact on economic growth.

Results of a research study. Theories of economic growth and monetary regulation arose simultaneously with the advent of the quantitative theory of money (QTM) [4].

However, modern theories came to the fore only in the 1930s, primarily the Keynesian Liquidity Preference Theory and Monetarism (both flows arose from QTM). Subsequently, several more theories gained popularity, namely: Neoclassical Real business-cycle theory, the Neo-Keynesian model and the New Consensus Model (NCM), which has been at the center of monetary policy analysis over the past two decades [5; 6].

For many years, the assessment of the short-term and long-term effects of monetary regulation on real variables, in particular, output (volume of production), has remained mixed and has been at the center of many studies (Walsh C., 2003) [11]. Most studies have focused mainly on the long-term neutrality of monetary policy in developed countries (Asongu S., 2014) [7].

The classical Monetarist theory is the first known theory of monetary policy and is enshrined in QTM by Irving Fisher, who laid the foundation for the relations between monetary policy (money) and economic variables. In this theory, the speed of money and the volume of production are assumed to be constant, so any increase in the amount of money will ultimately lead to price increases only proportionally in accordance with a quantitative theory. Long-term growth is affected only by real factors, and money supply is neutral both in the short and long term (Gali J., 2008; Mankiw G. and Taylor M., 2007) [4; 12].

Keynes rejected quantitative theory both theoretically and as an instrument of applied politics, for the reason that the velocity of money is unstable and impermanent. QTM also suggests a lack of compromise between inflation and output (Keynes J., 1936) [3]. Keynesian theory has proven that prices are tough and therefore the amount of money is changing rapidly. Money demand is not an exogenous factor, but rather endogenous and depends on income and interest rates, explained in the Liquidity Preference Theory.

The theory also suggests a relation between issue of money and interest rate, based on the dependence of the advantage of money supply, also known as the LM curve. The basic version of IS / LM model provides a fixed price level and, therefore, cannot be used to analyze inflation, but estimates the issue of money in a short term (Hicks J., 1937) [13].

To determine the equilibrium level in the money market, Liquidity Preference Theory combines money demand with the amount of money issued by the central bank. This equilibrium makes the interest rate a monetary instrument. It is assumed that money supply is exogenous, and any increase of its volume will lead to a decrease in an interest rate level, at which the necessary amount of money is equal to its supply. Lower interest rates have a positive effect on the marginal efficiency of capital and investment, leading to the expansion of production. Hicks's view through IS / LM on Keynes's general theory is appealed empirically (Robinson J., 1962; Leijonhufvud A., 1968).

Monetarist theory came to the fore in the 1950s, relying on the QTM foundation and assuming that the speed in the quantitative theory of money is generally stable, which implies that nominal income is largely a function of money supply (Friedman M. and Schwartz A., 1963) [14]. Monetarists supported the principle of a compromise between inflation and the issue of money, but

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reformulated the Philips curve in terms of real wages rather than nominal (Gottschalk J., 2005) [15]. Equilibrium in the labor market is achieved naturally, so the assumption of low wages prevails. The nominal rigidity of wages and prices suggests that monetary policy affects real income in the short term (stabilization); an increase in the money supply will result in a temporary increase in real output (GDP) and employment in the short term, but will not affect long term through the compensating effect of rising overall price levels. Money supply is inflationary in the long run, so the theory assumes long-term monetary neutrality.

In post-monetarism, real business cycle models, Neo-classical model, Neo-Keynesian models, and the New consensus model also dominated. The difference between these theories is actually small and relates to views on the nominal rigidity of wages and price levels, as well as on the interpretation of demand (Goodfriend M. and King R., 1997; Palley T., 2007) [5; 16].

The neoclassical currency model also implies perfect competition and flexible prices in all markets. This model also provides for a neutral monetary policy in relation to real variables. The neoclassical model has four important assumptions: rational expectations, the natural rate hypothesis, constant market cleansing, and information asymmetry. The equilibrium dynamics of employment, output and the real interest rate is determined independently of monetary policy, and it is assumed that the only real driving force is the development of technologies.

The above assumptions laid the foundation for the theory of neoclassical real business cycle, based on two principles: 1) money does not matter much in business cycles, 2) business cycles are created by subjects of the real sector of the economy that respond to real shocks (primarily technological) in an environment characterized by perfect competition and market freedom. Monetary policy (expected) will not affect real GDP according to the rational expectations hypothesis and the assumption of continuous market cleansing. Only monetary policy shocks (unexpected) will have a temporary effect on real variables (Mankiw G., 2006) [17]. The integration of «sticky prices» and monopolistic competition within the real business cycle has become the main hallmark of the neo-Keynesian economy (Goodfriend M. and King R., 1997) [5].

In neo-Keynesian models, prices or wages are temporarily tough; therefore, in response to external shocks, with changes in fiscal or monetary policies, the amount of money is adjusted. Monopolistically competitive companies are pricing in the commodity market, and households set wages in the labor market. Neo-Keynesianism is re-equipping traditional Keynesian models in accordance with microeconomic basics. The theory maintains money neutrality in the long run and argues that monetary policy can only affect short-term outcomes. Empirical evidence on the use of neo-Keynesian models remains scanty, and therefore the practical contribution of the theory is partially denied on the basis of the lack of a palpably pronounced role for money (Arestis P. and Sawyer M., 2008) [6].

The new consensus model has become the product of the neoclassical model and the neo-Keynesian model — supporting the rational expectations of the mentioned, as well as maintaining the rigidity of wages and prices in the short term. It also became the basis for inflation targeting, where price stability was the main goal, while other goals, including economic growth, became secondary. Interest rates are also considered the only monetary policy instrument. The model assumes that monetary policy should be aimed at short-term stabilization of production and long-term price stability. The issue of money stabilization can also be seen in the aggregate demand curve — the New Consensus Model, where the level of issue is inversely related to the real interest rate. This implies that the monetary policy of short-term rates can affect the demand curve in the economy, ultimately converging to a long-term equilibrium with the supply curve (Fontana G. and Palacio-Vera A., 2007) [18].

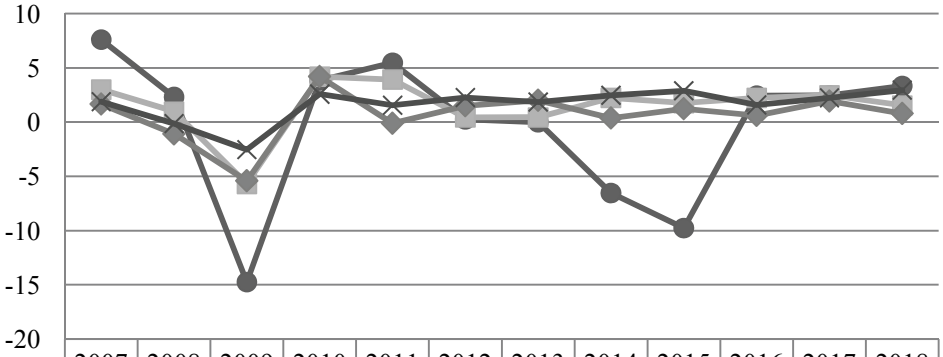
The new consensus model is facing irresistible criticism. This is due to the lack of a pronounced role of money and the exchange rate, inadequate attitude to the markets (financial, labor and capital), the orientation towards a single monetary instrument and the independence of central banks reduce its usefulness, especially for developing countries and countries with an open economy (Arestis P. and Sawyer M., 2008; and Fontana G. and Palacio-Vera A., 2007) [6, 18].

Based on the analysis of scholars' views on the impact of monetary regulation on economic growth, it can be concluded that thoughts are divided by those who characterize the weak relationship between these phenomena [Kamaan S. (2014) Montiel R. et al. (2012); Lashkary M.

and Kashani N. (2011)] and those who prove a close relation (Havi E. and Enu G. (2014) Vinayagathasan T. (2013) Davodi N. et al. (2013).

Based on the foregoing, we can conclude that the influence of monetary regulation on economic growth takes place when choosing the regulatory model itself and the instruments for its implementation. First of all, it is advisable to study macroeconomic indicators.

The study of the statistical base of countries compared with Ukraine should begin with an indicator of economic growth over the period from 2007 to 2018, which are reflected in *Fig. 1*. Three representatives of different types of financial systems were selected for the study: Japan, Germany and United States.



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ukraine	7,59	2,30	-14,7	3,83	5,47	0,24	-0,03	-6,55	-9,77	2,44	2,47	3,34
Germany	2,98	0,96	-5,70	4,18	3,92	0,42	0,43	2,23	1,74	2,23	2,47	1,53
Japan	1,65	-1,09	-5,42	4,19	-0,12	1,50	2,00	0,37	1,22	0,61	1,93	0,79
USA	1,88	-0,14	-2,54	2,56	1,55	2,25	1,84	2,45	2,88	1,57	2,22	2,93

Fig. 1. Dynamics of the economic growth indicator in 2007—2018, %

Source: calculated by the authors using the materials [19].

The data presented in *Fig. 1* indicate that the level of economic growth depends on the impact of various crisis situations in countries. A time interval of 2007 was chosen to study the impact of the crisis of 2008th on the economies of selected countries compared to Ukraine. The most negative impact of the global crisis was suffered by Ukraine, while United States suffered the least negative. The negative influence of Ukraine was incurred due to a weaker economy compared to the countries selected for the study. At the same time, the growth of the country's external debt, GDP growth with high inflation and the dependence of the banking sector on foreign capital led to an «explosion» from mid-2008, which affected the decline in economic growth. Again, it is possible to trace a clear dependence of Ukraine on the 2014 political crisis, which immediately led to a decrease in economic growth to the level of -9,7%.

United States and Germany show the most stable economic growth trend, while in Japan there is a dynamic trend. At the same time, the indicator of 2018 th is characterized by growth for Ukraine and USA. Analyzing possible factors of the occurrence of this situation in Germany, it is worth to note that the basis is in the dependence on global cyclicality and subordination to export operations. The decline in the country's exports is based on a weakening global economy and a decrease in the auto market due to new standards of eco-compliance.

Considering the possible factors of economic growth in Ukraine for the researched period, it can be argued that these depend on the projected expectation of the introduction of structural state reforms. At the same time, the main factor in GDP growth is the expansion of domestic consumption. Despite the annual economic growth, it is worth to state the problematic nature of its impact on improving the general standard of living in the country. If in compared countries economic growth depends on the influence of factors of a global scale, in Ukraine it is a problem of incomplete transformations of socio-economic, monetary and political natures. Significant influence on economic growth in Ukraine is also dependent on the export of raw materials, the weakness of state regulatory institutions, and the lack of bilateral integration.

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For a more descriptive display of economic growth, *Fig. 2* shows the dynamics of changes in the size of the GDP of the four studied countries.

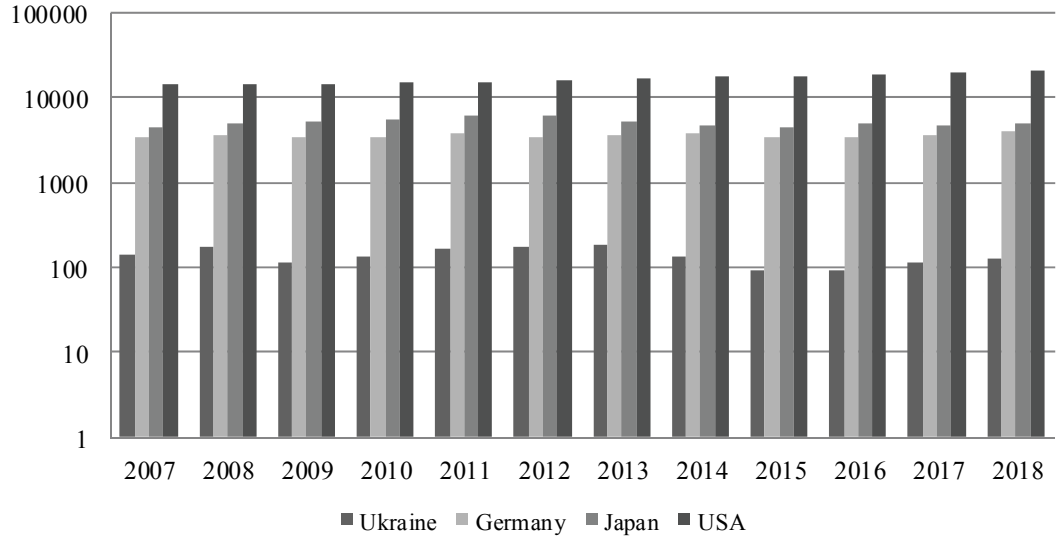
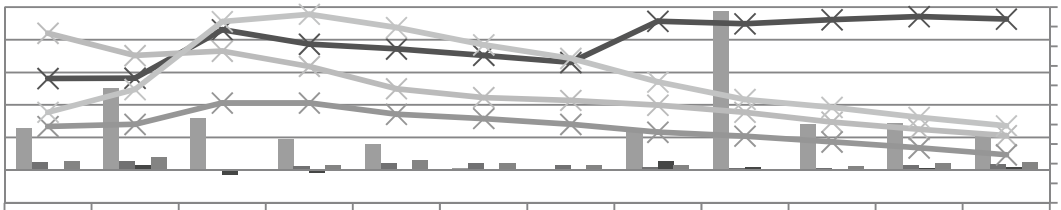


Fig. 2. Comparative dynamics of the size of GDP in 2007—2018, bn$

Source: calculated by the authors using the materials [19].

As mentioned earlier, the largest GDP is represented by United States, which is characterized by a rather positive upward trend in economic growth. The worst situation is still observed in Ukraine.

It should be noted that economic growth, based on the above models of monetary regulation, is affected by the level of unemployment and inflation (*Fig. 3*).



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ukraine	12,8	25,2	15,9	9,4	8,0	0,6	-0,2	12,1	48,7	13,9	14,4	11,0
Germany	2,3	2,6	0,3	1,1	2,1	2,0	1,5	0,9	0,5	0,5	1,5	1,7
Japan	0,1	1,4	-1,4	-0,7	-0,3	-0,1	0,3	2,8	0,8	-0,1	0,5	1,0
USA	2,9	3,8	-0,4	1,6	3,2	2,1	1,5	1,6	0,1	1,3	2,1	2,4
Ukraine	6,3	6,4	8,8	8,1	7,9	7,5	7,2	9,3	9,1	9,4	9,5	9,4
Germany	8,7	7,5	7,7	7,0	5,8	5,4	5,2	5,0	4,6	4,1	3,7	3,4
Japan	3,9	4,0	5,1	5,1	4,5	4,3	4,0	3,6	3,4	3,1	2,8	2,4
USA	4,6	5,8	9,3	9,6	8,9	8,1	7,4	6,2	5,3	4,9	4,4	3,9

Fig. 3. Dynamics of inflation and unemployment rates for the period 2007—2018, %

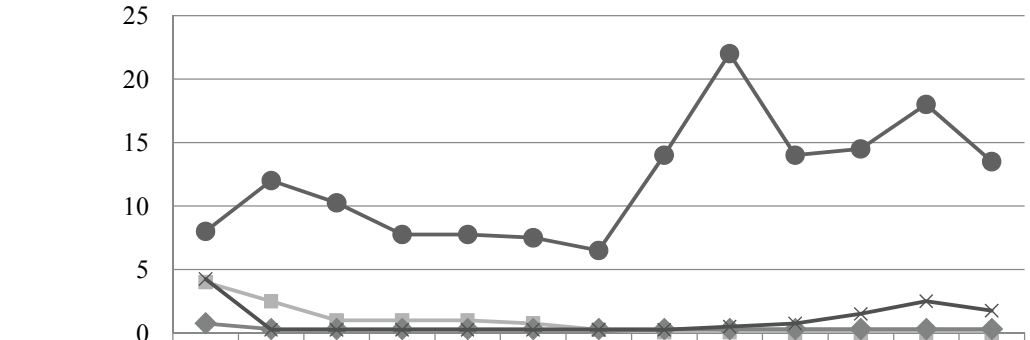
Source: calculated by the authors using the materials [19].

The data shown in *Fig. 3* allows tracing the tendency of changes in unemployment and inflation in countries over a decade. The highest unemployment rate is observed in Ukraine. The political crisis after 2014 had an impact on the indicator, sharply raising it to a size of 9,3% in 2014. In the studied countries, there is a constant tendency to decrease unemployment. With low unemployment in Japan and Germany, it is worth to explore approaches differ from Ukraine's one. It is difficult to name the reduction of unemployment in Japan the main goal of the government. This is rather due to deflationary trends in the country and an aging population. In addition, Japan

has a life-long hiring system, on the basis of which up to 40% of employees work. In Germany, a number of «Harz» reforms have been used [20] to reduce unemployment.

A slightly opposite trend is reflected in the inflation rate. In 2018, the indicator is growing in all compared countries, except Ukraine. It is worth noting that in Ukraine the target indicator of monetary regulation is to reduce inflation based on monetary inflation targeting regime use.

Among instruments of monetary regulation it should be noted the discount (key) rate, which is set by central banks (*Fig. 4*).

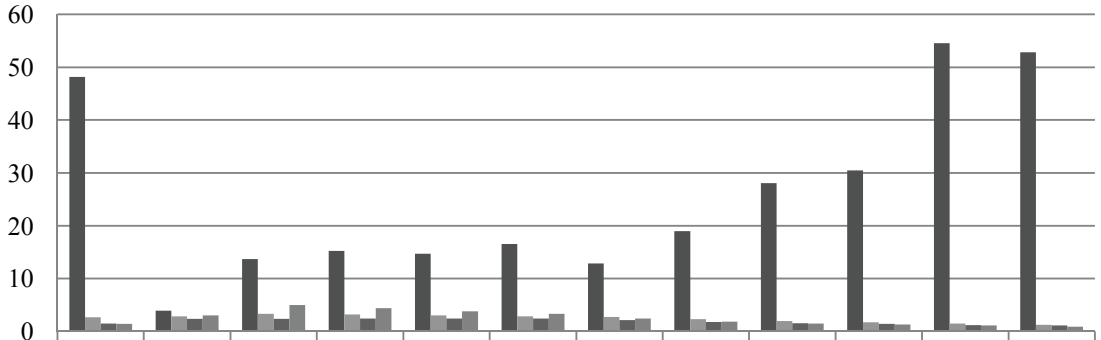


	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Ukraine	8,00	12,0	10,2	7,75	7,75	7,50	6,50	14,0	22,0	14,0	14,5	18,0	13,5
Germany	4	2,5	1	1	1	0,75	0,25	0,05	0,05	0	0	0	0
Japan	0,75	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3
USA	4,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,5	0,75	1,5	2,5	1,75

Fig. 4. Dynamics of the key (discount) rate in 2007—2019, %

Source: calculated by the authors using the materials [19].

As shown by the data in *Fig. 4*, in countries such as Germany and Japan, the discount rate does not play a key role in regulating the monetary market. In Ukraine, the discount rate is an indicator for setting the price of credit resources' supply. Although, over the past period, it has a certain dynamics to decrease, this does not affect the reduction of interest rates on banks' loans. This is due to the high proportion of non-performing loans in the domestic economy, and also has a negative impact on economic growth (*Fig. 5*).



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ukraine	48,12	3,88	13,70	15,27	14,73	16,54	12,89	18,98	28,03	30,47	54,54	52,85
Germany	2,65	2,85	3,31	3,20	3,03	2,86	2,70	2,34	1,97	1,71	1,50	1,24
Japan	1,50	2,40	2,40	2,46	2,45	2,43	2,13	1,75	1,53	1,40	1,19	1,10
USA	1,40	3,00	4,96	4,39	3,78	3,32	2,45	1,85	1,47	1,32	1,13	0,91

Fig. 5. Dynamics of non-performing loans in 2007—2018, % of total loans

Source: calculated by the authors using the materials [19].

Monetary regulation instruments also include the dynamics and structure of money supply, study of which should be realize on the basis of the principle of minimizing the influence of negative factors in the external and internal environment, and requires science to provide theoretical

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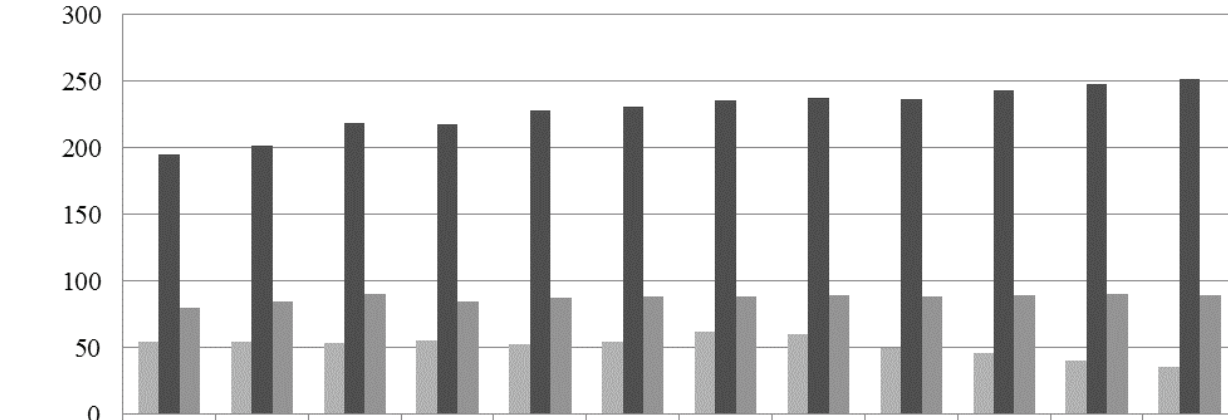
and practical support for making appropriate management decisions. Analysis of the dynamics of money supply is of paramount importance in assessing money demand, stability of which determines the effectiveness of monetary regulation (*Fig. 6*).



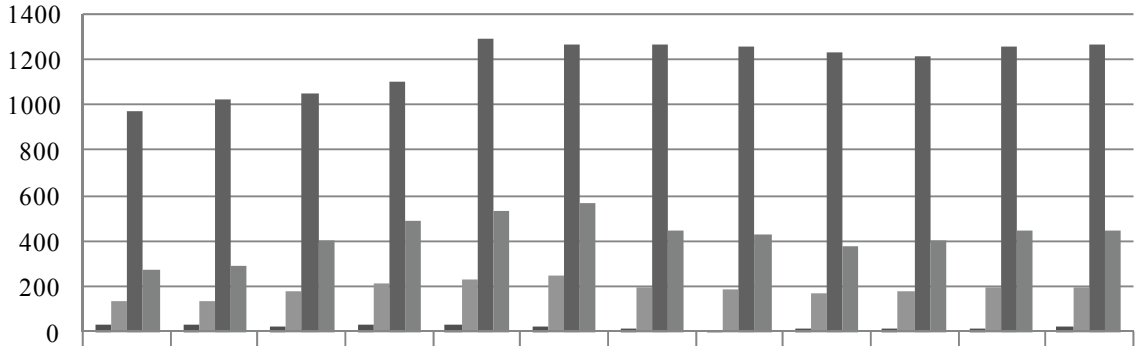
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ukraine	55,02	54,45	53,41	55,39	52,73	55,04	62,04	60,29	49,99	46,23	40,51	35,90
Japan	195,57	201,36	218,63	217,69	228,08	231,43	235,50	237,37	236,51	243,61	247,83	252,08
USA	79,60	84,58	90,87	85,17	87,64	88,23	88,97	89,64	88,92	89,93	90,49	89,32

Fig. 6. Dynamics of monetization level in 2007—2018, %

Source: calculated by the authors using the materials [19].

Monetization characterizes the level of money supply to the economy and the demand function for domestic currency. The main condition for sustainable economic growth is to provide money supply to the necessary and sufficient level. Excess money in the economy leads to the deployment of inflationary processes, can have a devastating effect on the economic entities' vitality. As can be seen from the data presented in *Fig. 6*, the monetization level in Ukraine tends to decrease and in 2018 reached the level of 35.90%, which is quite low. Mentioned above indicates that the lack of money supply restrains the development of social production and causes low business activity and insufficient level of liquidity and solvency, negatively affects the indicators of economic growth.

Economic growth in the country fairly depends on the existing foreign exchange (official) reserves. As an instrument of monetary regulation these reserves reflect the country's solvency and ability to fulfill external obligations (*Fig. 7*).



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ukraine	32,48	31,54	26,50	34,57	31,79	24,55	20,41	7,54	13,30	15,54	18,81	20,82
Germany	135,93	138,56	179,04	215,98	234,10	248,86	198,54	193,48	173,73	184,03	199,98	198,03
Japan	973,30	1030,7	1051,6	1104,5	1295,8	1268,0	1266,8	1260,6	1233,1	1216,5	1264,1	1270,4
USA	277,55	294,05	404,10	488,93	537,27	574,27	448,51	434,42	383,73	405,94	451,29	449,91

Fig. 7. Dynamics of foreign exchange reserves in 2007—2018, bn$

Source: calculated by the authors using the materials [19].

According to this data, Ukraine has a low level of foreign exchange reserves in comparison with the studied countries. Practically formed foreign exchange reserves are only comply minimum requirements for their volume.

In order to ensure sustainable economic growth and improve the living standards, it is necessary to reduce the dependence of Ukrainian economy on the influence of external and internal factors. This is possible due to the transition to a model of innovative development of the economy and the achievement of qualitative changes in the domestic hold. Such a transition involves not only deep structural transformations, but also the formation of the most favorable monetary conditions for economic growth.

The monetary regulation model should be based on the developed monetary rules whose advantages are: elimination of inconsistencies and contradictions in policy; minimization of prejudice and motiveless decisions; reduction of uncertainty, as well as transparency, predictability and clarity of monetary policy; increasing confidence in monetary authorities; reduction of negative effects from the time gap between the adoption and implementation of decisions; increased discipline, accountability and responsibility of a central bank; decrease in the amplitude of cyclical fluctuations and stabilization of the economy; reduction of political pressure on a central bank; promoting decentralization and de-concentration of public administration [8, p. 41].

Conclusions. The research showed that the rapid development of monetary policy and economic growth theories is marked by certain contradictions, uncertainty and cross flows. The evolution of theories is represented by the Keynesian Liquidity Preference Theory, Monetarism, Neoclassical Real business-cycle theory, the Neo-Keynesian model, and the New Consensus Model. Each of the models has its own characteristics, based on the objects of monetary regulation (money supply, inflation, interest rates, exchange rate).

Concerning Ukraine, in the conditions of using the monetary design on the basis of the inflation targeting regime and considering the importance of increasing the efficiency of using basic monetary regulation's instruments, it is necessary, first of all, to ensure the consistency of monetary and fiscal policies.

The coordination of monetary and fiscal policies should consist in developing and implementing them in such a way that they do not contradict each other and together contribute to the achievement of the common goals of economic policy, such as sustainable economic growth and low unemployment in terms of long-term price and external stabilities.

The ability of National bank of Ukraine to successfully implement the inflation targeting policy is associated with the low effectiveness of the key channel of monetary transmission — the interest rate channel. The consumer price index has been chosen as an indicator to achieve the inflation targeting goals of NBU. It does not allow the central bank to fully influence this indicator due to the non-monetary component in the structure of the consumer price index. Therefore, it is advisable to use the basic consumer price index, which NBU has a direct impact on.

The insufficient efficiency of the monetary transmission mechanism is reflected in the imbalance of money and foreign exchange markets, the deformation of the credit market and the credit climate degradation, and the decrease in the influence of monetary impulses of the central bank on both the financial system and the real sector of the economy. That is, the main problem of the significant influence of monetary regulation on economic growth in the country lies in restoring the effectiveness of the channels of the transmission mechanism of monetary policy, which depends on the choice of monetary design.

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